

ABSTRACT OF THE DISCLOSURE

A radiographic apparatus obtains lag-free radiation detection signals with lag-behind parts removed from radiation detection signals taken from a flat panel X-ray detector as X rays are emitted from an X-ray tube. The lag-behind parts are removed by a recursive computation on an assumption that the lag-behind part included in each X-ray detection signal is due to an impulse response formed of exponential functions, N in number, with different attenuation time constants. X-ray images are created from the lag-free radiation detection signals.